

CLAIMS

1. A permanent magnet rotor, comprising:
a solid cylindrical permanent magnet;
5 a power transmitting member connected to an axial end of said permanent magnet, and
a reinforcement sleeve fitted on an outer circumferential surface of said permanent magnet.
- 10 2. A permanent magnet rotor according to claim 1, wherein said reinforcement sleeve is made of fiber reinforced plastic material.
3. A permanent magnet rotor according to claim 1, wherein said power transmitting member comprises a shaft member extending continuously from said
15 permanent magnet, and said reinforcement sleeve overlaps a certain length of said shaft member.
4. A permanent magnet rotor according to claim 3, wherein said length is selected such that L/D is 0.14 or greater where L is said overlap length, and D is an outer
20 diameter of said permanent magnet.
5. A permanent magnet rotor according to claim 1, wherein said power transmitting member is connected to said axial end of said permanent magnet by brazing.

6. A permanent magnet rotor according to claim 5, wherein two different brazing materials are applied to opposing ends of said permanent magnet and said power transmitting member, respectively, said brazing materials being separated by a partition wall member.